FACT SHEET

TRADETRUST: A TRUSTED GLOBAL NETWORK FOR DIGITALLY INTERCONNECTED TRADE DOCUMENTS

1. **Background**

   International trade forms the backbone of Singapore's open and trade-friendly economy. Conventional digitalisation efforts thus far have given rise to increasingly fragmented and siloed digital ecosystems, preventing an efficient, automated process for the exchange of electronic documents.

   Singapore, in collaboration with various domestic and international agencies and industry partners, is developing TradeTrust, an interoperability framework to connect different platforms and enable them to exchange digital trade documentation.

2. **Future-Ready Digital Utility for Trade Documents**
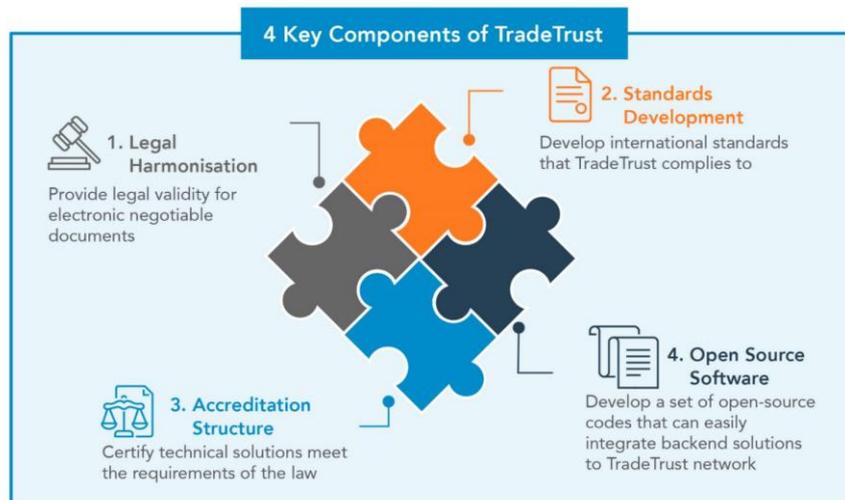
   Using distributed ledger technology (DLT), TradeTrust will provide participants with proof of authenticity and origins for these documents, enabling a more seamless and efficient flow of goods between digitally interconnected trading partners. The current software release is able to perform title transfer on trade documents electronically, which is pivotal in transforming paper-based processes to digital ones for cross-border trade.

3. **Benefits of TradeTrust**

   TradeTrust can bring benefits to the global trade, finance and logistics community:

   1) **Increased efficiencies through certainty**
      Reduce the risk of fake documents/information as sources will be immutably recorded. This removes the need for repetitive checks by the various parties to confirm that documents received are legitimate.

2) Reduced costs of documentation
Digitalising paper documents reduces friction and costs such as printing, handling and transportation of typically hundreds of pages amongst numerous parties, significantly reduce the costs of shipping[1].

3) Support for new service offerings through digitalisation and interoperability
TradeTrust works with the current ecosystem to enable various enterprise and platform systems to interoperate. Coupled with enabling legal validity of electronic trade documents, TradeTrust can:

- Aid the convergence of physical, financial and document chains, making automation of key processes possible, e.g. automate payments or release of funds using smart contracts when conditions are met.

- Leverage transparency and integrity of shipment events to lower some risks for cargo insurance where underwriters can reinvent the way cargo insurance premiums are priced, e.g. instead of static pricing, they can dynamically price the premium as cargo moves through its voyage.

4. TradeTrust – Progress and Key Milestones

The four TradeTrust components work in concert to give participants of the network the trust and legal validity assurance of the digital documents that are exchanged:

1) Legal Harmonisation
Singapore's Electronic Transactions Act (ETA) is being reviewed to implement the UNCITRAL Model Law on Electronic Transferable Records (MLETR) to provide legal certainty to electronic transactions, and legally recognise electronic negotiable instruments like electronic Bills of Lading (eBLs) in Singapore. For cross-border trade to be fully digital, other trading nations also need to mutually recognise such documents as valid title documents. Singapore is working closely with overseas governments to promote trade digitalisation and provide legal certainty to electronic trade documentation through multi-lateral and bilateral agreements, such as Digital Economy Agreements.

2) Standards Development
Singapore has been actively driving and aligning TradeTrust with standards development at the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) and the International Organisation for Standardisation (ISO). We have contributed to the Inter-Government Ledger (IGL)[2] project to develop standards specification to replace paper documents with high integrity digital processes as well as leading the Transfer of MLETR-compliant title[3] project. We have also actively contributed to ISO/TC 307/WG6[4] on TradeTrust use cases.

3) Accreditation Structure
For solutions to be accredited to meet the requirements of the law i.e. MLETR compliant, an accreditation framework is being developed to certify solutions for compliance.

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[1] Trade document processing and administration is estimated to add 20% to the physical cost of shipping a single container.
https://www.ibm.com/blogs/blockchain/2018/04/enterprise-ready-blockchain-brings-transparency-to-supply-chains/
[2] For more info, see:
https://uncefact.unece.org/display/uncefactpublic/Cross+border+Interledger+exchange+for+Preferential+CoO+using+Blockchain
[3] For more info, see https://uncefact.unece.org/display/uncefactpublic/Transfer+of+MLETR-compliant+titles for more info
[4] For more info: see https://www.iso.org/committee/6266604.html

4) Open Source Software

The TradeTrust software is being rolled out in phases, as open source software[5] to promote early adoption. The latest release achieves document proof of authenticity and provenance, title transfer and identity resolution. Companies are encouraged to download the software to test its viability and to deploy it.

5. Key Partnerships and Engagements

Singapore is bringing together a diverse range of international and industry stakeholders through the development of TradeTrust.

1) First TradeTrust Transaction

In November 2019, the first TradeTrust transaction was conducted through DBS Bank, Trafigura, International Chamber of Commerce (ICC), Perlin Network and IMDA, where the partners announced the completion of a pilot trade using the ICC Tradeflow powered by TradeTrust, for a shipment of iron ore worth USD20M from South Africa to China. Documentation time was cited to be reduced by more than half, from 45 to 20 days.

2) More Industry Partners Coming On Board

a) Partnership with ICC and 17 firms to accelerate trade digitalisation

In January 2020, IMDA, the ICC and 17 global organisations signed an MOI to facilitate and accelerate adoption of digital technologies in trade and commerce. This collaboration amplifies the impact of our joint leadership in pushing for the digitalisation of trade.

b) TradeTrust Challenge

The TradeTrust Challenge called industry partners to submit proposals addressing real-life industry issues on cross-border trade and trade financing. Six winning proposals were awarded under this challenge: https://www.imda.gov.sg/programme-listing/blockchain-challenge

c) Partnership with SWIFT to drive global trade digitalisation

The collaboration between IMDA and SWIFT announced at SIBOS 2020 aims to combine our effort to drive digital-enabled trade globally. With IMDA's contribution as a public sector agency and SWIFT's role as a leader in the trade and trade financing sector, this partnership will further boost the impact of our push towards global trade digitalisation.

3) Government-to-Government Collaborations

IMDA together with the Maritime and Port Authority of Singapore (MPA) are co-leading projects to conduct proofs of concept on eBL. Ongoing trials with the Port of Rotterdam Authority, and the Commerce Bureau Shenzhen Municipality under the Singapore-Shenzhen Smart City Initiative, are underway to conduct trade digitally and perform title transfers on eBL. Projects related to IGL are also currently being carried out with Australia under the Singapore-Australia Digital Economy Agreement.

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[5] The software is available for download at https://github.com/TradeTrust